



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,677	04/11/2001	Craig Rae Fowler	60,130-787	1880

26096 7590 10/03/2003

CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

PATEL, RAJNIKANT B

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,677

Applicant(s)

Fowler et al.

Examiner

Rajnikant Patel

Art Unit

2838



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 27, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2838

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1 and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Recker et al.(U.S. Patent # 5,198,971) or Cocconi (U.S. Patent # 5,341,075)..

Art Unit: 2838

Recker et al's figure 2, discloses all the claimed subject matters of invention (Abstract, line 1-14).

Similarly Cocconi's figures 2-3, discloses all claimed subject matters (column 4, line 10-65).

4. Claims 1 and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Mizoguchi (U.S. Patent # 4,802,079).

Mizoguchi discloses claimed invention a system for converting single phase alternating current to multi phase alternating (figure 4-5) current for simultaneously powering multiple vehicle system comprising the steps of : producing single phase alternating current from direct current source (figure 5) with pulse width modulation (column 2, line 50-60); splitting the single phase alternating current in to a plurality of separate path including at least a first path, a second path and third path (figure 4, item 14,15 and 16), shifting the phase of the alternating current on the second path to be different than phase of the first path and shifting the phase of the alternating current on the third path to be different than first or second paths to create three phase alternating current power; and operating vehicle system with the three phase alternating current power column 4, line 5-60 and column 5, line 2-50).

5. Claims 1 and 10 rejected under 35 U.S.C. 102(e) as being anticipated by Yamanaka et al. (U.S. Patent # 6,058,032).

Yamanaka et al.'s figures 5,7A-C, 8 and 11 discloses claimed subject matters.

Art Unit: 2838

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6,8,10,12-13 and 16,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (U.S. Patent 4,745,348) in combination with Recker et al. (U.S. Patent # 5,198,971).

Young discloses claimed invention a method for converting single phase alternating current to multiple phase alternating current for simultaneously powering multiple vehicle systems (figure 1) comprising the steps of : Splitting single phase alternating current into a plurality of separate paths including at least a first path, a second path, and third path; shifting the alternation current on the second path to be different than the phase of the path and shifting the phase of the alternating current on the third path to be different than first or second paths to create three phase alternating current power, and operating vehicle system with the three-phase alienating current power.

However Young does not discloses the utilization of technique for a producing single phase alternating current from a direct current source with PWM. Recker et al. teaches the utilization of

Art Unit: 2838

similar technique for a producing single phase alternating current from a direct current source with PWM (figure 4-5)

In regards to claims 7,9,11,14-15,17-18 and 20-21. Young in combination with Recker et al. discloses the claimed invention except for the utilization of technique of a vehicle battery power, thirty six volt battery power or power is utilize for vehicle devices. It would have been an obvious matter of design choice to utilize vehicle battery or thirty volt power or powering vehicle devices, since such a modification would have involved a mere change in the size of a component or utilize different suitable component is generally recognized as being within the level of ordinary skill in the art. In re rose, 105, USPQ 237 (CCPA 1955). Also it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

8. Any inquiry concerning this communications or earlier from the examiner should be directed to Raj. Patel whose telephone number is (703) 305-7042. Any inquiry of a general nature or relating to the status of application should be directed to the Group receptionist whose telephone number is (703) 308-0956.


RAJNIKANT B. PATEL
PRIMARY EXAMINER